

WHAT IS CLAIMED IS:

1. An optical pickup apparatus comprising:
 - a carriage body;
 - an optical parts accommodation module mounted on said carriage body and accommodating at least (i) a light beam emitting portion for emitting a light beam, (ii) a light beam receiving portion, (iii) a beam splitter and (iv) a grating for generating a sub beam for a tracking adjustment out of the light beam emitted from said light beam emitting portion; and
 - a grating adjustment mechanism for rotating said optical parts accommodation module,
said optical parts accommodation module being mounted on said carriage body in such a condition that said optical parts accommodation module is allowed to rotate with an axis line of the light beam, which is irradiated toward a disc, as a rotational center,
said grating adjustment structure having a cam plane abut to an abut plane formed at a portion apart from the axis line of said optical parts accommodation module and including a slide cam member mounted in such a condition that said slide cam member is regulated to be movable on a straight line with respect to said carriage body.
2. An optical pickup apparatus according to claim 1, wherein
said slide cam member is movable on the straight line in parallel to a plane including the axis line.

3. An optical pickup apparatus according to claim 2, wherein
said cam plane is inclined with respect to the straight line.

5 4. An optical pickup apparatus according to claim 1, wherein
said slide cam member comprises an engagement aperture portion
with which a driver for a grating adjustment is engaged.

5. An optical pickup apparatus according to claim 1, wherein
10 said optical parts accommodation module comprises:

an annular guide portion disposed around an opening
through which the light beam is irradiated to an external portion
thereof with the axis line of the light beam as a center; and

15 a circular arc protrusion with the axis line as a center on a
line extended from the axis line.

6. An optical pickup apparatus according to claim 5, wherein
said carriage body comprises:

20 a V-shaped supporting portion for supporting said annular
guide portion; and

a V-shaped supporting portion for supporting said circular
arc protrusion.

25 7. An optical parts accommodation module mounted on an
optical pickup apparatus comprising:

a casing body;

TOP SECRET 2025 RELEASE

at least (i) a light beam emitting portion, (ii) a light beam receiving portion, (iii) a beam splitter for branching a going path light beam, which is directed toward a disc from said light beam emitting portion, from a returning path light beam, which is directed toward said light beam receiving portion from said disc and (iv) a grating for generating a sub beam for a tracking adjustment out of a light beam emitted from said light beam emitting portion, which are accommodated in said casing body; and

an opening portion formed in said casing body, through which

5 the light beam is irradiated to an external portion toward said disc,

10 said casing body comprising an annular guide portion disposed around the opening with an axis line of the light beam irradiated through the opening as a center, a circular arc protrusion⁴⁹ with the axis line as a center on a line extended from the axis line,

15 and an abut plane which is formed at a portion apart from the axis line of ~~said optical parts accommodation module~~ and to which a grating adjustment member of said casing body abuts with the axis line as a center thereof.

(12(2)) Casing body
same as module
The axis line
is in the same part